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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/672,421	09/28/2000	Dov Bulka	40921-205583	8185

26108 7590 09/21/2004

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EXAMINER	
CARDONE, JASON D	
ART UNIT	**PAPER NUMBER**
2145	

DATE MAILED: 09/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/672,421	BULKA ET AL.	
	Examiner	Art Unit	
	Jason D Cardone	2145	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 June 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4,6-9,11-16,20-23,25-28,30-35,39 and 40* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *39 and 40* is/are allowed.

6)☒ Claim(s) *1-4,6-9,11-16,20-23,25-28 and 30-35* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☒ Other: *See Attached Office Action*.

DETAILED ACTION

Response to Amendment

1. This action is responsive to the amendment of the applicant, filed on 6/17/04. Claims 1-4, 6-9, 11-16, 20-23, 25-28, 30-35, 39 and 40 are presented for further examination.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-4, 11-16, 20-23 and 30-35 rejected under 35 U.S.C. 102(e) as being anticipated by Risley et al. ("Risley"), USPN 6,332,158.

4. Regarding claim 1, Risley discloses a caching system for identifying memory component identifiers associated with data in a storage device, comprising: means for creating a cache of the memory component identifiers, wherein the memory component identifiers comprise identifiers that are invalid; and means for managing the cache of memory component identifiers [ie. cache for invalid web page addresses (memory component identifiers) Risley, col. 8, lines 46-58 and col. 9, lines 49-67].

5. Regarding claim 2, Risley further discloses the memory component identifiers further comprise identifiers selected by a user [Risley, col. 5, lines 16-26 and col. 10, lines 14-31].

6. Regarding claim 3, Risley further discloses memory component identifiers further comprise identifiers that are valid [Risley, col. 8, lines 46-54 and col. 9, lines 49-52].

7. Regarding claim 4, Risley further discloses a disk drive including a disk in which is stored a tree structure of data located in directories and files; and a main memory for storing data, the data stored in the memory being accessible at a rate substantially faster than the rate at which data stored on a disk can be accessed [Risley, col. 8, lines 1-22 and col. 9, lines 28-35].

8. Regarding claims 11-13, Risley further discloses the cache is one of a negative cache of memory component identifiers that are not associated with data in the storage device, wherein the negative cache comprises a predetermined number of cache entries for storing a history of the memory component identifiers that are not associated with data in the storage device, wherein the predetermined number of cache entries is based on usage of the memory component identifier [Risley, col. 5, lines 16-26, col. 9, lines 49-67 and col. 10, lines 14-31].

9. Regarding claims 14 and 15, Risley further discloses the negative cache comprises a percentage of cache entries stored in a cache system of valid memory component identifiers, wherein the negative cache is used for storing a history of the memory component identifiers that are not associated with data in the storage device [Risley, col. 9, lines 19-35 and col. 10, lines 14-31].

10. Regarding claim 16, Risley further discloses the cache is further comprises a positive cache of memory component identifiers that have been written to at least one storage device [Risley, col. 8, lines 46-54 and col. 9, lines 49-52].

11. Regarding claims 20-23 and 30-35, claims 20-23 and 30-35 have similar limitations as claims 1-4 and 11-16. Therefore, the similar limitations are disclosed under Risley for the same reasons set forth in the rejection of claims 1-4 and 11-16 [Supra 1-4 and 11-16].

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

13. Claims 6-9 and 25-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Risley in view of Ish et al., ("Ish"), USPN 5,778,430.

14. Regarding claim 6, Risley substantially discloses the claimed invention. Risley discloses updating caches [Risley, col. 3, line 59 – col. 4, line 6] but does not specifically disclose updating the cache by removing a least recently used memory component identifier in accordance with a least recently used routine. However, Ish, in the same field of endeavor, discloses updating the cache by removing a least recently used memory component identifier in accordance with a least recently used routine [Ish, col. 3, line 44 – col. 4, line 18]. It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate updating a cache, disclosed by Ish, into the negative cache system, disclosed by Risley, in order to efficiently manage the cache.

15. Regarding claim 7, Risley-Ish further discloses updating the cache by adding a most recently used memory component identifier in accordance with a most recently used routine [Risley, col. 3, line 59 – col. 4, line 6] [Ish, col. 7, lines 16-29].

16. Regarding claim 8, Risley-Ish further discloses updating the cache by adding a most frequently searched memory component identifier in accordance with a most frequently searched routine [Risley, col. 3, line 59 – col. 4, line 6] [Ish, col. 6, lines 7-17].

17. Regarding claim 9, Risley-Ish further discloses updating cache by removing least frequently searched memory component identifier in accordance with least frequently searched routine [Risley, col. 3, line 59 – col. 4, line 6] [Ish, col. 7, lines 30-49].

18. Regarding claims 25-28, claims 25-28 have similar limitations as claims 6-9. Therefore, the similar limitations are disclosed under Risley-Ish for the same reasons set forth in the rejection of claims 6-9 [Supra 6-9].

Allowable Subject Matter

19. Claims 39 and 40 allowed.

Response to Arguments

20. Applicant's arguments filed 6/17/04 have been fully considered but they are not persuasive.

21. (A) Applicants' invention relates a caching system in a data processing system. This is clearly in contrast with the teachings of Risley. Risley has nothing to do with cache management techniques in a data processing system. Hindsight interpretation was designed to arrive at Applicants' claimed invention.

As to point (A), the recitation of "in a data processing system" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). Since the claim limitations do not define a "data processing system", the claims must be given

their broadest reasonable interpretation. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Hindsight interpretation was not used, since the claim limitations in the body of the independent claims have broad scope. Therefore, Risley does disclose the instant claimed limitations within the body of the independent claims [ie. cache for invalid web page addresses (memory component identifiers) Risley, col. 8, lines 46-58 and col. 9, lines 49-67].

22. (B) There is no concept of a user employing any type of caching scheme at the user's computer for invalid identifiers relating to data in a storage device.

As to point (B), it is noted that the features upon which applicant relies (i.e., "a user employing any type of caching scheme at the user's computer") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). The claim does not specifically disclose that the "caching system" must be on a user's computer. Therefore, Risley does disclose the instant claimed limitations within the body of the independent claims.

23. (C) Ish has nothing to do with Applicants' claimed invention.

As to point (C), one cannot establish non-obviousness by attacking references individually where, as here, the rejection is based on combinations of references. *In re Merck & Co.*, 800 F.2d 1091, 1097 231 USPQ 375, 380 (Fed. Cir. 1986) (citing In re Keller, 642 F.2d 413, 426, 208 USPQ 871, 880 (CCPA 1981). In determining

obviousness, furthermore, references are read not in isolation but for what they fairly teach in combination with the prior art as a whole. *Id.* at 1097, 231 USPQ at 380. It is the combination Risley-Ish rather than Ish alone that discloses the instant claimed subject matter. Risley substantially discloses the claimed invention. Risley discloses updating caches [Risley, col. 3, line 59 – col. 4, line 6] but does not specifically disclose updating the cache by removing a least recently used memory component identifier in accordance with a least recently used routine. However, Ish, in the same field of endeavor, discloses updating a cache by removing a least recently used memory component identifier in accordance with a least recently used routine [Ish, col. 3, line 44 – col. 4, line 18]. It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate updating a cache, disclosed by Ish, into the negative cache system, disclosed by Risley, in order to efficiently manage the cache.

Conclusion

24. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

25. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason D Cardone whose telephone number is (703) 305-8484. The examiner can normally be reached on Mon.-Thu. (9AM-6PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Harvey can be reached on (703) 305-9705. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jason D Cardone
Primary Examiner
Art Unit 2145

September 16, 2004